

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Brian Altmiller on January 28, 2011.

The following changes have been made to the subject application:

In the **Specification**, page 1, please insert the following new paragraph after the Title and before the "TECHNICAL FIELD":

--RELATED APPLICATIONS

This application is a 371 of PCT/JP05/05245 filed 03/23/2005, which claims priority under 35 U.S.C. 119 to an application JP 2004-107598 filed on 03/31/2004, JP 2004-107802 filed on 03/31/2004, JP 2004-107841 filed on 03/31/2004, JP 2004-212437 filed on 07/21/2004, JP 2004-212444 filed on 07/21/2004, and JP 2004-212449 filed on 07/21/2004, the contents of which are incorporated herein by reference.--

In claims:

Claims 1 and 34 have been amended as follows:

Claim 1. (Currently Amended) A microstrip antenna comprising:
an insulating substrate;
a plurality of antenna electrodes disposed upon one surface of said substrate, each having a feed point for application of a radio wave signal;
a ground electrode disposed upon the other side of, or in the interior of, said substrate, for supplying ground level; and

a connection member that connects at least one antenna electrode among said plurality of antenna electrodes to said ground electrode, at least at one spot thereof which is different from said feed point of said at least one electrode, the connection member being configured such that at least one antenna electrode among the plurality of antenna electrodes is unconnected to said ground electrode;

wherein said connection member is disposed at a location within a plane region occupied by said at least one antenna electrode when said at least one antenna electrode is seen in plan view, such that a direction of an integrated radio wave beam which is emitted from said plurality of antenna electrodes is inclined from a direction normal to said substrate by connecting said at least one antenna electrode to said ground electrode at said location.

Claim 34. (Currently Amended) A microstrip antenna comprising:

an insulating substrate;

a plurality of antenna electrodes disposed upon one surface of said substrate, each having a feed point for application of a radio wave signal;

a ground electrode disposed upon the other side of, or in the interior of, said substrate, for supplying ground level; and

a connection member that selectively connects at least one a first antenna electrode selected from among said plurality of antenna electrodes to said ground electrode, and leaves at least one second antenna electrode selected from among said plurality of antenna electrodes unconnected to said ground electrode, in response to one or more control signals, at least at one spot of the connection member being different from said feed point of said at least first antenna electrode;

wherein said connection member is disposed at a location within a plane region occupied by said at least one first antenna electrode when said at least one first antenna electrode is seen in plan view, such that a direction of an integrated radio wave beam which is emitted from said plurality of antenna electrodes is inclined from a direction normal to said substrate by connecting said at least one first antenna electrode to said ground electrode at said location.

Non-elected claims 26-33 have been canceled.

The Examiner's amendment has been made to update priority applications, and clarify the claimed language in order to place the application in a condition for allowance.

Reasons for Allowance

1. Claims 1-6, 10-13, 21-23 and 34 are currently allowed.
2. The following is an examiner's statement of reasons for allowance:

The cited art of record teach a microstrip antenna comprising a plurality of antenna electrodes disposed upon one surface of said substrate, each having a feed point for application of a radio wave signal, a ground electrode disposed upon the other side of, or in the interior of, said substrate, for supplying ground level. However, the cited art of record fail to teach a connection member that connects at least one antenna electrode among said plurality of antenna electrodes to said ground electrode, at least at one spot thereof which is different from said feed point of said at least one antenna electrode, the connection member being configured such that at least one antenna electrode among the plurality of antenna electrodes is unconnected to said ground electrode such that a direction of an integrated radio wave beam which is emitted from said plurality of antenna electrodes is inclined from a direction normal to said substrate by connecting said at least one antenna electrode to said ground electrode at said location as defined in claims 1 and 34.

3. Any comments considered necessary by applicant must be submitted no latter than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Inquiry

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh Vo Dinh whose telephone number is (571) 272-1821 and email address is trinh.dinh@uspto.gov. The examiner can normally be reached on IFW (Increase Flexible Work). The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens, can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 30, 2011

/Trinh Vo Dinh/
Primary Examiner, Art Unit 2821